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RTP PREPARATION

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V. ACTION ELEMENT - ANALYSIS

The Action Element - Analysis

The second major component required in all RTPs is the “Action Element”. The Action Element of the RTP consists of short and long-term activities that address regional transportation issues and needs. All transportation modes (highways, mass transportation, railroad, maritime, bicycle, pedestrian use, and aviation facilities and services) are addressed. In addition, the Action Element should also identify the investment strategies, alternatives and project priorities beyond what is already programmed. Aside from the emphasis on specific transportation modes, the Action Element should include a detailed discussion of transportation determinants. Determinants may include physical capacity constraints, transportation and land use coordination, information technology, etc.

The Action Element is divided into two sections. The first section includes a discussion of the preparatory activities such as identification of existing need, assumptions, forecasting, and potential alternative actions. The second section addresses the data and conclusions.

A. Assumptions

Fundamental to the Action Element is the establishment of assumptions. These assumptions form the definition of what is acceptable based upon adopted goals, policies and objectives and are part of the projection equation (e.g. 3.5 persons / single family detached house). For this reason the assumptions should be clearly and concisely presented. See Appendix D, page D-6 for a detailed list of areas that should be addressed in the assumptions.

B. Needs and Scenarios

The Needs and Scenarios Section identifies potential significant regional and statewide transportation needs and issues for all transportation facilities and services. As part of this identification, RTPAs should work cooperatively with adjacent jurisdictions where there are potential impacts on the transportation system. The RTP should also discuss how the transportation planning needs were determined and the scenarios developed.

C. Forecasting

Generally, there are two procedures (methods) used for forecasting; (1) a “market based” approach (referred to as a “tops down” approach) based on demographic and economic trends, or (2) a “build out” approach based on General Plans and other adopted plans. The “tops down” approach is based on national, state, regional economic and demographic trends in the region. The “build out” approach, by contrast, allocates growth to specific geographic locations. The ideal forecasting approach combines both methods, identifying and resolving differences between General Plans and economic trends.

Data forecasting should address the following:

- Population (including migration and immigration);
- Households;
- Employment;
- Income;
- Land use changes and growth for the transportation alternatives under study;
- Traffic forecasts for the transportation alternatives under study and;
- Environmental conditions and potential conflicts.

Projections should be based upon available data (such as from the Bureau of the Census), use acceptable forecasting methodologies, and be consistent with the Department of Finance baseline projections for the region. The RTP should identify and discuss any differences between the agency projections and those of the Department of Finance.

D. Alternatives

Transportation improvement alternatives are developed from the data analysis. The number and types of alternatives are generally based on land use forecasts, roadway network, funding potential and transit options. In addition, the location of sensitive environmental resources and the TEA 21 requirement to consider projects and strategies that protect and enhance the environment should be factored into the analysis. Alternatives should include: sets of capital improvements, operational strategies, new technologies, demand management options and land use considerations.

The alternatives considered in the action element shall (Title 23, USC Sec. 134(f)) provide for consideration of projects and strategies that protect and enhance the environment. This requirement reflects the value of minimizing adverse environmental impacts in the development of alternatives. In addition to good planning practices, the identification and the analysis of alternatives is a requirement of CEQA. Alternatives must be developed that avoid significant environmental impacts. The streamlining of former Major Investment Study requirements into the State and regional planning process may also require the intermodal analysis.

Based upon identified (1) transportation issues, (2) environmental constraints, (3) regional policies, and (4) likely scenarios, several clearly defined, realistic transportation alternatives should be developed. The following criteria should be considered in evaluating these alternatives.

Cost Considerations

- Life-cycle costs, including operations;
- Projected economic benefits and detriments to area(s) affected (both short and long-term);
- Right-of-way acquisition costs;
- Environmental study, permit, and mitigation costs;
- Maintenance costs (for the projected useful life of the project);
- Project management, planning and other support costs;
- Capital costs.

Social Impacts

23 CFR 450.316 requires that the following be explicitly considered and reflected in the transportation planning process of the RTP developed by the MPO:

- Effects on housing,
- Effects on employment,
- Effects on community development,
- The effectiveness of transportation system performance and related impacts on community/central city goals regarding social and economic development.

E. Regional Transportation Plan Analysis

The analysis should evaluate the specific alternatives to accomplish the RTP objectives. The specific “ranking” process used to ascertain the preferred alternatives should be clearly addressed.

The Action Element analysis also involves assessment and the development of specific analytical tools. These tools might include, for example, performance measures or alternative corridor analysis. The type of analysis used should be clearly discussed. The specific planning analysis should rely on a logical evaluation process using performance objectives versus forecasted performance to identify transportation needs and deficiencies.

Environmental issues need to be addressed mainly at the regional level, as they are primarily regional or larger in scope. These issues include: air pollution, water pollution, solid and hazardous waste generation, resource consumption, ozone depletion, climate change, emissions, loss of habitat, loss of open space, visibility, noise, etc.

This is the level at which alternatives can be developed which maximizes environmental protection and enhancement while also minimizing transportation problems. Within each corridor, sub-region or region, the alternative strategies, should be evaluated as a coherent system and for accomplishing the RTP's policies, goals and objectives. Appendix D, page D-11 provides a list of areas that the RTP planning analysis should consider.

The planning analysis should have enough detail to document each transportation project's purpose and need. This information is used to develop the concept and scope of the transportation improvements identified in the Action Element.

F. Major Investment Studies (MIS)

TEA 21 eliminated the requirement of the Major Investment Studies (MIS) as a separate requirement but calls for the integration of many of its components into the planning and NEPA process. The Federal Department of Transportation is developing planning and environmental procedures in response to TEA 21, that would specifically address the MIS requirements. The new provisions may require the State, RTPAs, and transit agencies to develop a mutually acceptable approach to sub-regional planning and project development in metropolitan areas.